ADVANCED PLACEMENT

Indiana State Approved Course Titles and Descriptions

Indiana Department of Education College and Career Readiness 151 West Ohio Street Indianapolis, IN 46204

ADVANCED PLACEMENT

Academic content standards are at: http://www.doe.in.gov/standards

Teacher Requirements are available at: http://www.doe.in.gov/educatorlicensing/pdf/AssignmentCode.pdf

Introduction

Advanced Placement (AP) courses are intended to be equivalent to a similar college level course. The College Board does not designate a time period during which the content of the high school course is to be covered. Most AP courses require two traditional semesters to adequately address the course content and prepare students for the associated exam. The bulleted items following each course description indicate a few AP classes that could conceivably be completed in either one semester or two. All schools wishing to label a course "AP" must submit the subject-specific AP Course Audit form and the course syllabus to the College Board for each teacher of that AP course. The AP course audit information and is available at www.collegeboard.com/html/apcourseaudit. It is also strongly recommended that all AP teachers take advantage of professional development opportunities in their content area.

Student Selection Criteria for AP courses: The College Board suggests that all students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to AP courses. The College Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally underrepresented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population. The IDOE further supports a school developing criteria for admission to AP courses to include, but are not limited to, AP Potential, previous success in content area courses, teacher recommendations and standardized test results.

Advanced Placement (AP) Courses are intended to be the equivalent to the comparable college level course. Most AP courses require instructional time equivalent to two traditional semesters, or one academic year in order to adequately address the course content and prepare students for the associated exam. However, the bulleted items following each course description indicate the AP courses that could conceivably be completed in either one semester or two.

ART HISTORY, ADVANCED PLACEMENT

4025

(ART HIST AP)

Art History, Advanced Placement is a course based on the content established by the College Board. Art History is designed to provide the same benefits to secondary school students as those provided by an introductory college course in art history: an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. This course incorporates research, extensive reading, and analytical writing. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 9, 10, 11, or 12
- Credits: A two-semester course, one credit per semester
- Fulfills requirement for Fine Arts credits for Core 40 with Academic Honors diploma

 Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

BIOLOGY, ADVANCED PLACEMENT (L)

3020

(BIO AP)

Biology, Advanced Placement is a course based on the content established by the College Board. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisite: Biology I and Chemistry I
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

CALCULUS AB, ADVANCED PLACEMENT

2562

(CALC AB AP)

Calculus AB, Advanced Placement is a course based on content established by the College Board. Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/repository/ap-calculus-course-description.pdf.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisite: Pre-Calculus
- Credits: A two credit course, 1 credit per semester
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

CALCULUS BC, ADVANCED PLACEMENT

2572

(CALC BC AP)

Calculus BC, Advanced Placement is a course based on content established by the College Board. Calculus BC is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; (3) integrals; and (4) polynomial approximations and series. Technology should be used regularly by students and teachers

to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/repository/ap-calculus-course-description.pdf.

- The content of *Calculus BC* is designed to qualify the student for placement and credit in a course that is one course beyond that granted for *Calculus AB*.
- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisite: Pre-Calculus
- Credits: A two credit course
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

CHEMISTRY, ADVANCED PLACEMENT (L)

3060

(CHEM AP)

Chemistry, Advanced Placement is a course based on the content established by the College Board. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Advanced Placement (AP) Courses are intended to be the equivalent to the comparable college
 level course. Most AP courses require instructional time equivalent to two traditional semesters,
 or one academic year in order to adequately address the course content and prepare students
 for the associated exam. However, the bulleted items following each course description indicate
 the AP courses that could conceivably be completed in either one semester or two.
- Recommended Grade Level: 12
- Recommended Prerequisite: Chemistry I, Algebra II, Precalculus/Trigonometry
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

CHINESE LANGUAGE AND CULTURE, ADVANCED PLACEMENT (CHI LANG AP)

2014

Chinese Language and Culture, Advanced Placement is a course which follows the College Board course guidelines for AP Chinese Language and Culture and prepares students to be successful on the AP Chinese Language and Culture exam. Emphasizing the use of the Chinese language for active communication, the AP Chinese Language and Culture course has as its objectives the development of advanced listening comprehension, reading without the use of a dictionary, expanded conversational skills, fluent and accurate written expression, and strong command of vocabulary and structure of the Mandarin Chinese language. Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. Additional emphasis is given to exploration and understanding of both contemporary and historical Chinese culture, integrating the study of the Chinese language with the study of Chinese culture. The AP Chinese Language and Culture course seeks to develop language skills and cultural understanding that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions should also be emphasized. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Chinese I, II, and III
- A 2-credit course, 1 credit per semester
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

COMPUTER SCIENCE A, ADVANCED PLACEMENT

4570

(COMP SCI AP)

Computer Science A, Advanced Placement is a business mathematics course that provides students with the content established by the College Board. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and also includes the study of data structures, design, and abstraction. The course provides students an alternative to taking pre-calculus or calculus to fulfill the four-year math requirement for graduation. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/repository/ap-computer-science-course-description.pdf.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: Digital Communication Tools, Computer Applications, Algebra I, and Algebra II
- Credits: A two-credit course, 1 credit per semester
- Highly recommended that teachers attend an in-depth workshop on Computer Science AP before teaching this course
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

ENGLISH LANGUAGE AND COMPOSITION, ADVANCED PLACEMENT

1056

(LNG/COMP AP)

English Language and Composition, Advanced Placement, is an advanced placement course based on content established by the College Board. An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

- Recommended Grade Level: Grade 11 or 12 (College Board does not designate when this
 course should be offered).
- Recommended Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation
- Credits: 2 credits, a two-semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- English 12 could be incorporated into this course, if this course is offered at Grade 12

ENGLISH LITERATURE AND COMPOSITION, ADVANCED PLACEMENT

1058 (LIT/COMP AP)

English Literature and Composition, Advanced Placement, is an advanced placement course based on content established by the College Board. An AP English course in Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 and 12
- Recommended Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation
- Credits: 2 credits, a two-semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- College Board does NOT designate the grade level (Grade 11 or 12) when this course should be offered.
- English 12 could be incorporated into this course, if this course is offered at Grade 12

ENVIRONMENTAL SCIENCE, ADVANCED PLACEMENT (L)

3012

(ENVSCI AP)

Environmental Science, Advanced Placement is a course based on content established by the College Board. Students enrolled in AP Environmental Science investigate the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 12
- Recommended Prerequisite: Biology and Chemistry
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

EUROPEAN HISTORY, ADVANCED PLACEMENT

1556

(EUR HST AP)

European History, Advanced Placement is a course based on content established by the College Board. Topics include: (1) intellectual and cultural history, (2) political and diplomatic history, and (3) social and economic history. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and

(c) an ability to express historical understanding in writing._A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: World History
- Credits: A 1 or 2 semester course, 1 credit per semester
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

FRENCH LANGUAGE AND CULTURE, ADVANCED PLACEMENT

2032

(FR LANG AP)

French Language, Advanced Placement is based on content established by the College Board Emphasizing the use of the French language for active communication, the AP French Language course has as its objectives the development of Spoken Interpersonal Communication, Written Interpersonal Communication, Audio, Visual, and Audiovisual Interpretive Communication, Written and Print Interpretive Communication, Spoken Presentational Communication, Written Presentational Communication, . Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. Students develop language skills that are useful in themselves and can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions should also be emphasized. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: French I. II and III
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

GERMAN LANGUAGE AND CULTURE, ADVANCED PLACEMENT

2052

(GER LANG AP)

German Language, Advanced Placement is a course based on content established by the College Board. Emphasizing the use of the German language for active communication, the AP German Language course has as its objective the development of Spoken Interpersonal Communication, Written Interpersonal Communication, Audio, Visual, and Audiovisual Interpretive Communication, Written and Print Interpretive Communication, Spoken Presentational Communication, Written Presentational Communication, Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. The AP German Language course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions should also be emphasized. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: German I, II and III
- Credits: A 2-credit course, 1 credit per semester

 Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

GOVERNMENT AND POLITICS: COMPARATIVE, ADVANCED PLACEMENT (GOVT AP)

Government and Politics: Comparative Advanced Placement is a course that provides students with the content established by the College Board. Topics include: (1) the sources of public authority and political power, (2) the relationship between state and society, (3) the relationship between citizens and states, (4) political institutions and framework, (5) political change, and (the comparative method). A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

• Recommended Grade Level: Grades 11 or 12

1552

1560

- Recommended Prerequisites: United States Government
- Credits: 1 or 2 semester course. 1 credit per semester.
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- No longer fulfills the US Government requirement for any diploma

GOVERNMENT AND POLITICS: UNITED STATES, ADVANCED PLACEMENT (US GOVT AP)

Government and Politic: United States, Advanced Placement is a course based on content established by the College Board. Topics include: (1) constitutional underpinnings of United States government, (2) political beliefs and behaviors, (3) political parties, interest groups, and mass media, (4) institutions of national government, (5) public policy, and (6) civil rights and civil liberties. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Fulfills the US Government requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

HUMAN GEOGRAPHY, ADVANCED PLACEMENT

1572 (HUM GEO AP)

Human Geography, Advanced Placement is a course based on the content established by the College Board. The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Topics include: (1) Geography: its nature and perspectives, (2) population, (3) cultural patterns and processes, (4) political organization of space, (5) agriculture and rural land use, (6) industrialization and economic development, and (7) cities and urban land use. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

- Recommended Grade Level: Grades 11 or 12
- Recommended /Required Prerequisites: none
- Credits: A 1 or 2 semester course, 1 credit per semester
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

ITALIAN LANGUAGE AND CULTURE, ADVANCED PLACEMENT

2272

(ITAL AP)

Italian Language and Culture, Advanced Placement is a course which follows the College Board course guidelines for AP Italian Language and Culture and prepares students to be successful on the AP Italian Language and Culture exam. Emphasizing the use of the Italian language for active communication, the AP Italian Language and Culture course has as its objective the development of advanced listening comprehension, reading without the use of a dictionary, expanded conversational skills, fluent and accurate written expression, and strong command of vocabulary and structure of the Italian language. Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. The AP Italian Language and Culture course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions should also be emphasized.

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Italian I, II and III
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

JAPANESE LANGUAGE AND CULTURE, ADVANCED PLACEMENT

2074

(JAP LANG AP)

Japanese Language and Culture, Advanced Placement is a course which follows the College Board course guidelines for AP Japanese Language and Culture and prepares students to be successful on the AP Japanese Language and Culture exam. Emphasizing the use of the Japanese language for active communication, the AP Japanese Language and Culture course has as its objectives the development of advanced listening comprehension, reading without the use of a dictionary, expanded conversational skills, fluent and accurate written expression, and strong command of vocabulary and structure of the Japanese language. Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. Additional emphasis is given to exploration and understanding of both contemporary and historical Japanese culture, integrating the study of the Japanese language with the study of Japanese culture. The AP Japanese Language and Culture course seeks to develop language skills and cultural understanding that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions and effective Japanese keyboarding skills should also be emphasized. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Japanese I, II, and III
- A 2-credit course, 1 credit per semester

15

 Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

LATIN ADVANCED PLACEMENT

2092

(LAT VER AP)

Latin Advanced Placement is a course which follows the College Board course guidelines for AP Latin and prepares students to be successful on the AP Latin exam. The AP Latin: exam is designed to test the students' ability to using Vergil and Caesar as a base.

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Latin I, II and III
- Credits: A 2-credit course, 1 credit per semester
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

MACROECONOMICS, ADVANCED PLACEMENT

1564

(MACRO-ECON)

Macroeconomics, Advanced Placement is a course based on the content established by the College Board. The course places particular emphasis on the study of national income and price-level determinations, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Topics include: (1) Basic economic concepts, (2) measurement of economic performance, (3) national income and price determination, (4) economic growth, and (5) international finance, exchange rates, and balance of payments. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: 1 or 2 semester course. 1 credit per semester.
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas, a Social Studies requirement for the General Diploma, or counts as an Elective for any diploma

MICROECONOMICS, ADVANCED PLACEMENT

1566

(MICRO-ECON)

Microeconomics, Advanced Placement is a course based on content established by the College Board. The course gives students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economics system. Topics include: (1) basic economic concepts, (2) the nature and functions of product markets, (3) factor markets, and (4) market failure and the role of government. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None

- Credits: 1 or 2 semester course. 1 credit per semester.
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas, a Social Studies requirement for the General Diploma, or counts as an Elective for any diploma

MUSIC THEORY, ADVANCED PLACEMENT

4210

(MUS TH AP)

Music Theory, Advanced Placement is a course based on the content established by the College Board. Music Theory is intended for secondary school students who have completed music studies comparable to a first-year college course in music theory. The guidelines for the course that are published by The College Board may not match any particular college program, but they do reflect the coverage of content and level of skills typical of most first-year college courses. This course should integrate aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and history, and style. The student's ability to read and write musical notation is fundamental to this course, and it is also assumed that the student has acquired at least basic performance skills in voice or on an instrument. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 10, 11, or 12
- Laboratory course
- Credits: a 2 semester course for 1 credit each semester.
- Fulfills requirement for two Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

PHYSICS B, ADVANCED PLACEMENT (L)

3080

(PHYS B AP)

Physics B, Advanced Placement is a course based on content established by the College Board that is the equivalent of a terminal, one year college physics course. AP Physics B should provide instruction in each of the content areas (1) Newtonian Mechanics (35%); (2) Fluid Mechanics and Thermal Physics (15%); (3) Electricity and Magnetism (25%); (4) Waves and Optics (15%); and (5) Atomic and Nuclear Physics (10%). A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 12
- Recommended Prerequisite: Physics I, Pre-Calculus/Trigonometry
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

PHYSICS C, ADVANCED PLACEMENT (L)

3088

(PHYS C AP)

Physics C, Advanced Placement is a course based on the content established by the College Board. There are two AP Physics C courses, Physics C: Mechanics, and Physics C: Electricity and Magnetism. AP Physics C: Mechanics provides instruction in each of the following six content areas: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular

motion and rotation; and oscillations and gravitation. AP Physics C: Electricity and Magnetism provides instruction in each of the following five content areas: electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 12
- Recommended Prerequisite: Physics I, Calculus (can be taken concurrently)
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

PSYCHOLOGY, ADVANCED PLACEMENT

1558

(PSYCH AP)

Psychology, Advanced Placement is a course based on content established by the College Board. This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes. Topics include: (1) history and approaches, (2) research methods, (3) biological bases of behavior, (4) sensation and perception, (5) states of consciousness, (6) learning, (7) cognition, (8) motivation and emotion, (9) developmental psychology, (10) personality, (11) testing and individual differences, (12) abnormal psychology, (13) treatment of psychological disorders, and (14) social psychology A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

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- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

SPANISH LANGUAGE. ADVANCED PLACEMENT

2132

(SP LANG AP)

Spanish Language, Advanced Placement is a course based on content established by the College Board. Emphasizing the use of the Spanish language for active communication, the AP Spanish Language course has as its objective the development of advanced listening comprehension, reading without the use of a dictionary, expanded conversational skills, fluent and accurate written expression, and strong command of vocabulary and structure of the Spanish language. Course content might best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. The AP Spanish Language course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Extensive practice in the organization and writing of compositions should also be emphasized. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Spanish I, II and III
- Credits: A 2-credit course, 1 credit per semester

 Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

SPANISH LITERATURE AND CULTURE, ADVANCED PLACEMENT

2134

(SP LIT AP)

Spanish Literature and Culture, Advanced Placement is a course based on content established by the College Board. Spanish Literature and Culture, Advanced Placement is designed to introduce students to

the formal study of texts from in Peninsular and Latin American literature. This course is based on the three modes of communication (interpersonal, interpretive and presentational) and the five goal areas (communication, cultures, connections, comparisons and communities) Through this course, students will develop skills that allow for in-depth poetry, thematic, and text analyses. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11-12
- Recommended Prerequisites: Spanish I, II and III
- Credits: A 2-credit course, 1 credit per semester
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

STATISTICS, ADVANCED PLACEMENT

2570

(STAT AP)

Statistics, Advanced Placement is a course based on content established by the College Board. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: (1) exploring data: describing patterns and departures from patterns (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, and (4) statistical inference: estimating population parameters and testing hypotheses. The use of graphing calculators and computer software is required. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/repository/ap-statistics-course-description.pdf.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisite: Algebra II or Integrated Mathematics III
- Credits: 1 or 2 semester course. 1 credit per semester. Due to the level of rigor, it is recommended that AP Statistics be offered as a 2 semester, 2 credit course.
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

STUDIO ART (DRAWING PORTFOLIO), ADVANCED PLACEMENT

4048

(ART DRP AP)

Studio Art, Advanced Placement – Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational, and inventive works may demonstrate drawing competence. Any work that makes use of (appropriate) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. This is demonstrated through manipulation of the formal

qualities, design, and/or concept of the source. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: Advanced laboratory visual arts courses
- Credits: a 2-semester course, 1 credit per semester
- Fulfills requirement for 2 Fine Arts credits for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

STUDIO ART (2D DESIGN PORTFOLIO), ADVANCED PLACEMENT

4050

(ART 2D AP)

This portfolio is intended to address two-dimensional (2-D) design issues. Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. The *principles* of design articulated through the visual *elements* help guide artists in making decisions about how to organize the elements on a picture plane in order to communicate content. For this portfolio, students are asked to demonstrate proficiency in 2-D design through any two-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. Any work that makes use of (appropriates) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: Advanced laboratory 2-D visual arts courses
- Credits: a 2-semester course, 1 credit per semester
- Fulfills requirement for 2 Fine Arts credits for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

STUDIO ART (3D DESIGN PORTFOLIO), ADVANCED PLACEMENT

4052

(ART 3D AP)

This portfolio is intended to address sculptural issues as related to depth and space. Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency of 3-D design through any three-dimensional approach, including, but not limited to, figurative or nonfigurative sculpture, architectural models, metal work, ceramics, and three-dimensional fiber arts. Any work that makes use of (appropriates) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication.

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: Advanced laboratory 3-D visual arts courses
- Credits: a 2-semester course, 1 credit per semester
- Fulfills requirement for 2 Fine Arts credits for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

GOVERNMENT AND POLITICS: UNITED STATES, ADVANCED PLACEMENT

1560 (US GOVT AP)

Government and Politic: United States, Advanced Placement is a course based on content established by the College Board. Topics include: (1) constitutional underpinnings of United States government, (2) political beliefs and behaviors, (3) political parties, interest groups, and mass media, (4) institutions of national government, (5) public policy, and (6) civil rights and civil liberties. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Fulfills the US Government requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

UNITED STATES HISTORY, ADVANCED PLACEMENT

1562

(US HIST AP)

United States History, Advanced Placement is a course based on the content established by the College Board. The course has a chronological frame from 1492 to the present and focuses on multiple causation and change in United States history over time. A variety of historical themes are examined in order to place the history of the United States into larger analytical contexts. Students are expected to analyze and interpret primary sources and develop awareness of multiple interpretations of historical issues in secondary sources. Historical events and issues in U.S. history are to be examined from multiple perspectives. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Fulfills the US History requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

WORLD HISTORY, ADVANCED PLACEMENT

1576

(WLD HST AP)

World History, Advanced Placement is a course that provides students with the content established by the College Board. The course will have a chronological frame from the periods 8000 B.C.E. to the present. AP World History focuses on five overarching themes: Interaction Between Humans and the Environment, Development and Interaction of Cultures, State-Building, Expansion, and Conflict, Creation, Expansion, and Interaction of Economic Systems, Development and Transformation of Social Structures. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

- Recommended Grade Level: None
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Fulfills a Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma